

**PROCEEDINGS OF THE ANNUAL MEETING  
OF THE CALIFORNIA ASSOCIATION OF  
MEDICAL MILK COMMISSIONS, HELD IN  
SANTA BARBARA, APRIL 18, 1911.**

The meeting was called to order by Dr. T. C. McCleave at 2 p. m.

On motion, duly seconded, Dr. T. C. McCleave was appointed permanent Chairman and M. E. Jaffa temporary Secretary.

Dr. McCleave explained the purpose of the meeting to be the formation of a State Association by a federation of existing milk commissions.

On motion of Dr. Kress, it was voted to form such an association.

On motion, duly seconded, a committee on organization was appointed, consisting of Drs. T. C. McCleave, G. S. Baker and G. H. Kress.

The report submitted by Dr. Kress for the said federation of milk commissions was as follows:

I. The name of the organization shall be the California State Association of Medical Milk Commissions.

II. The officers shall be a President, First and Second Vice-Presidents and Secretary-Treasurer, these constituting an Executive Committee with power to act.

III. The funds of the Association shall be derived from assessments on component commissions, made in proportion to the amount of milk certified by each commission.

IV. Officers shall hold office for one year or until their successors are elected.

V. Meetings shall be held in connection with the State Medical Society, or at the call of the Executive Committee.

VI. All other rules shall conform to those of the American Association of Medical Milk Commissions.

The report submitted by Dr. G. H. Kress was on motion duly seconded and unanimously adopted.

On motion, duly seconded, a Nominating Committee was appointed by the chair, consisting of Drs. Baker, San Francisco; Kress, Los Angeles; Stoddard, Santa Barbara, and Fly, San Diego.

The Nominating Committee duly reported as follows: For President, Dr. T. C. McCleave, Berkeley; First Vice-President, Dr. F. P. Mattison, Pasadena; Second Vice-President, Dr. T. A. Stoddard, Santa Barbara; Secretary-Treasurer, Dr. Adelaide Brown, San Francisco.

On motion, duly seconded, these officers were unanimously elected.

The following papers were then read as per printed program: First, Dr. G. S. Baker gave a résumé of his paper which was read the previous day before the California Public Health League; second, Dr. C. L. Roadhouse read a paper on the "Prevention of Bovine Tuberculosis"; third, Dr. C. M. Haring read a paper, "The History of the Control of Tuberculosis in Three California Dairies."

The three papers read were thoroughly and ably discussed.

Dr. Fleischner gave an interesting short talk concerning the value of feeding certified milk to babies under the auspices of the Associated Charities. The

doctor indicated how the death rate had decreased since certified milk had been used.

Dr. Black discussed to some extent with Dr. Fleischner a claim that under the present conditions only the children of the rich and the very poor were able to obtain certified milk. Dr. Black believed that all children should have certified milk, and the way to arrive at such a result was to pass a tuberculin ordinance requiring that all cows be tested with the tuberculin test if such cows were to supply milk to be used for consumption as such.

An interesting discussion followed Dr. Black's remarks concerning the testing of cows with the tuberculin test, such discussion bearing on initial temperatures, number of temperatures, temperature of reaction, etc.

The question was also discussed, Does an increase of dose eliminate the immunity factor?

Dr. McCleave discussed very thoroughly the question of educating first the doctors themselves, second their patients, in the value of certified milk. It would appear that much has been accomplished by such an educational campaign.

Dr. Pottenger made some remarks to the effect that he did not believe all tuberculosis was due to milk and that the question of milk should not be given too much prominence in this connection. Dr. Pottenger was under the impression that about one-twelfth of the tuberculosis now existing is due to infection from milk, but even this was, according to the doctor, amply sufficient for the campaign and general agitation in favor of certified or "tuberculin tested" milk.

Dr. Parkinson confirmed the views of Dr. Pottenger in that there is a very small amount of infection due to milk; that such an opinion is based upon the experience that Dr. Parkinson has had in his practice. Dr. Parkinson as President of the Sacramento Board of Health works for clean milk—that is, clean, sanitary dairies and healthy cows. There are no certified dairies serving milk to Sacramento.

Dr. Baker replied to the remarks of Drs. Parkinson and Pottenger concerning the amount of tuberculosis due to the infection from milk. He was strongly of the opinion that if only one-twelfth of the tuberculosis found were due to infection from milk that it was more than sufficient incentive for the educational work in re certified milk now being carried on.

Dr. Hare of Fresno discussed the conditions existing there, and stated that they had no trouble with the dairymen in carrying out the ordinance. Dr. Hare is of the opinion that the state should pay, at least in part, for the cost of animals which react under tuberculin test.

The interesting discussion on tuberculosis being concluded, Dr. McCleave offered for adoption the regulations governing the manufacture of certified butter. The regulations were read and adopted.

After the reading of the regulations Dr. J. N. Force of Berkeley briefly discussed his paper, entitled "The Control of Pathogenic Organisms in Butter," which was read before the California Public Health League the previous day.

Dr. Baker was appointed by the California State

Association of Medical Commissions as delegate to the meeting of the Association of the American Milk Commissions, held at Philadelphia in June, 1911.

M. E. JAFFA, Secretary.

### REGULATIONS GOVERNING THE MANUFACTURE OF CERTIFIED BUTTER.

1. No factory under certification shall produce butter of a lower grade than certified.

2. Every factory desiring certification shall make application to the secretary of a medical milk commission, giving in detail the sources of its cream or milk supply with the number of cows in each herd, and shall deposit in cash or certified check a sum sufficient to cover a tuberculin test of each cow in each herd by the medical milk commission's expert at one dollar per head.

(a) No herd showing 10% of reactions shall deliver cream or milk to a certified butter factory.

(b) No refund shall be made on account of a herd failing to reach the required standard.

(c) Every animal reacting to the tuberculin test shall be immediately removed from the premises.

(d) All additions to herds shall be made in accordance with the requirements for certified milk.

(e) A semi-annual tuberculin test of all animals used in the production of cream shall be made by the commission's expert.

3. All premises producing cream, or manufacturing certified butter, shall be inspected by a committee of not less than two, from the medical milk commission before certification.

(a) The necessary traveling expenses of such committee shall be deposited with the secretary of the medical milk commission at the time of making application.

4. The management of the herd, the construction of stables, milk houses and butter factories shall comply with all the sanitary requirements adopted for the production of certified milk.

5. The sterilization of all utensils and implements used in the handling of milk and cream and the manufacture of certified butter shall correspond with similar rules for certified milk.

6. The starter shall be made from milk produced under these regulations. The milk shall be pasteurized twice at intervals of 24 hours, at 180° F. After pasteurizing, cool to 80° F. and add any good commercial dry lactic ferment, keep at 75° F. for 15-20 hours.

For the second propagation, pasteurize the starter milk at 180° F. for 20 minutes, cool to 70° F. and add another starter. Acidity of starter shall not exceed .7% after coagulation.

7. A medical examination of all persons concerned in the production, handling or manufacturing of milk, cream and certified butter shall be made by a member of the medical milk commission before certification.

(a) Monthly medical inspections shall be made after certification.

(b) The presence of an infectious disease on the farm, or in the factory, shall be cause for withdrawal or suspension of certification.

8. No cream shall be more than 24 hours old when delivered to the factory.

(a) It shall not be accepted by the factory if it contains more acid in 50 c. c. than will be neutralized by 13 c. c. of N/10 alkali solution as determined by Mann's Acid Test.

9. No pasteurized cream shall be used in the manufacture of certified butter.

10. Milk shall be removed from the stable as soon as drawn, run through a separator and immediately cooled to 50° F. and held at this temperature until delivered to the factory.

(a) If no farm separator is used, the milk shall be cooled to 50° F. as soon as drawn and held at 50° F. until delivered to the factory.

(b) Separator "slime" shall not be added to the cream.

11. Certified butter shall contain not less than 82% of milk fat and not more than 14% of moisture. If coloring matter is used the label must so state.

(a) It must score not less than 95 commercially.

(b) It must be full weight, wrapped in paper and sealed in a carton, which must bear the maker's name, the date of manufacture, and weight.

(c) The seal of the commission shall be affixed to the carton.

(d) The carton shall be submitted to the commission for approval before using.

12. Bacterial examinations of cream shall be made monthly, or oftener if considered necessary by the commission.

(a) Cream shall not contain more bacteria per c. c. than the standard of A. A. M. C. for certified cream, or if they have no standard, adopt B. A. I. score for perfect cream.

(b) A chemical examination of butter shall be made at least semi-monthly.

13. The butter factory shall be responsible to the commission for the carrying out of all regulations applying to the production of cream, and shall bear all expenses connected with certification.

14. Expense of maintaining certification shall be:

(a) Monthly inspection of butter factory and all dairies supplying cream, by the commission's expert, \$10 per day and expenses.

(b) Additional inspections when required by conditions.

(c) \$3 for each bacterial examination of cream.

(d) \$2.50 for each chemical examination of butter.

(e) \$1.25 per thousand for the commission's certificates, one of which shall be used on each carton of butter produced.

It is the sense of this meeting of the State Association of Medical Milk Commissions that the regulations for the production of dairy products, other than milk or butter, certified to by a medical milk commission, shall conform to those adopted for the production of certified milk and butter.

Adopted by California Association of Medical Milk Commissions, Santa Barbara, April 18, 1911.

### A HISTORY OF THE CONTROL OF TUBERCULOSIS IN THREE CALIFORNIA DAIRIES.

By C. M. HARING, D. V. M.

In the control of tuberculosis in dairy cattle we have a problem concerning which there is much to learn. Believing that a review of the efforts to keep tuberculosis out of certain California dairies would be of considerable educational value to dairymen, veterinarians and others interested in dairy sanitation, and be of especial interest to those attending this meeting, I have endeavored to recall the incidents connected with my work in certain dairies, and have made a study of the data concerning these dairies and of their tuberculin test records on file at the University. These are of tuberculin tests made by Dr. Ward, Dr. Roadhouse and myself, or by University students working under our supervision.

#### DAIRY NO. 1.

The cattle in this dairy were tested with tuberculin for the first time January 5th, 1905. The results of this test, and those subsequently made, are shown in table number 1. The number of cows that were tested was 77, of which 14 were condemned because of a reaction to tuberculin, the per-